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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,343	06/25/2003	Cristian Petrulescu	MSFT-1734/302203.1	3983
41505	7590	10/18/2006		
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			EXAMINER PIERRE LOUIS, ANDRE	
			ART UNIT 2123	PAPER NUMBER

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/606,343	<b>Applicant(s)</b> PETRULESCU ET AL.	
	<b>Examiner</b> Andre Pierre-Louis	<b>Art Unit</b> 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 39-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 39-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>060506</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/06/2006 has been entered.
2. Claims 1-30 are cancelled; and now claims 31-51 are presented for examination.

**Response to Arguments**

3. Applicant's arguments filed 09/06/2006 have been fully considered but they are not persuasive.
  - 3.1 During examination of the new submitted claims, the examiner notices that the claims now feature a third table and a number of identifying steps; however none of the claims are patentably distinct, as evidenced by the rejection set forth below.
  - 3.2 Applicant argues that Colby et al. does not teaches identifying each row in the first table that includes no data for the measure, the examiner respectfully disagrees relies on col.2 lines 1-23; and asserts that such data is simply a prediction and/ or a ruff estimation such as forecasting (see for example Colby et al. col.2 line 66-col.3 line 14); also see the tables definition in col.19-20).

**Claim Rejections - 35 USC § 101**

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4.0 Claims 31-51 are rejected under 35 U.S.C. 101 because the claims merely directed to non-statutory subject matter. The claims do not produce a useful, concrete and tangible result. **See MPEP 2106 [R2].**

**Claim Rejections - 35 USC § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.0 Claims 31-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Colby et al. (U.S. Patent No. 6,480,836).

5.1 In considering the independent claims 31,38, and 45, Colby et al. teaches the functional equivalence of a method in combination with first, second, and third tables of data, the first table organizing a first type according to a first attribute and a second attribute, the second table organizing a second type according to a third attribute, the third table organizing a third type according to the first attribute and the third attribute, in particular the steps of: modeling a measure according to the second type of the second table (*fig.5A-B, col.7 line 42-col.8 line 14*); modeling a first dimension according to the third attribute of the second table (*fig.5A-B, col.7 line 42-col.9 line 6*); modeling a second dimension according to the second attribute of the first table (*fig.5A-B, col.7 line 42-col.9 line 6*); tying the measure to the first dimension according to the third attribute

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of the second table to allow the measure to access data for the first dimension according to the third attribute (*fig. 1, 5, col.7 line 42-col.9 line 6*); and tying the measure to the second dimension by, for each entry of the first dimension, allocating a value of the measure for the entry of the first dimension by: identifying each row in the third table within which a value of the third attribute matches a value of the entry of the first dimension (*fig. 1A-D, 5A-B, col.2 line 1-col.3 line 22*); identifying a value of the first attribute within each identified row in the third table, and, for each identified value of the first attribute (*fig. 1A-D, col.2 line 1-col.3 line 22*); identifying each row in the first table that includes the value of the first attribute, the first table including no data for the measure (*fig. 1A-D, col.2 line 1-col.3 line 22*); identifying a value of the second attribute within each identified row in the first table ((*fig. 1A-D, col.2 line 1-col.3 line 22*); and identifying each entry in the second dimension for which a value of the entry of the second dimension matches an identified value of the second attribute (*fig. 1A-D, col.2 line 1-col.3 line 22*); and allocating at least a portion of the value of the measure for the entry of the first dimension to at least one of each identified entry of the second dimension (*fig. 1A-D, col.2 line 1-col.3 line 22, col.6 lines 49-65*). Colby et al. further the processor and memory of claim 45 (*see fig.3 and 7B*).

5.2 With regards to claims 32,39, and 46, Colby et al. teaches the step modeling the measure according to the second type of the second table, the second table comprising data stored in a relational database (*fig.1A-D, 3 col.2 lines 1-23 and col.5 lines 26-37*).

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5.3 As per claims 33,40, and 47, Colby et al. teaches the step of allocating a complete portion of the value of the measure for the entry of the first dimension to every identified entry of the second dimension (*fig. 1A-D, col.2 line 1-col.3 line 22, col.6 lines 49-65*).

5.4 Regarding claims 34,41, and 48, Colby et al. teaches the step of allocating less than a complete portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension (*fig. 1A-D, col.2 line 1-col.3 line 22, col.6 lines 49-65*).

5.5 As per claims 35,42, and 49, Colby et al. teaches the step of allocating an even portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension (*fig. 1A-D, col.2 line 1-col.3 line 22, col.6 lines 49-65*).

5.6 With regards to claims 36,43, and 50, Colby et al. teaches the step of allocating a proportional portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension (*fig. 1A-D, col.2 line 1-col.3 line 22, col.6 lines 49-65*).

5.7 As per claims 37,44, and 51, Colby et al. teaches the step of allocating a total value of the measure for the entry of the first dimension to a pre-determined principal identified entry of the second dimension (*fig. 1A-D, col.2 line 1-col.3 line 22, col.6 lines 49-65*).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 31-51 are further rejected under 35 U.S.C. 102(b) as being anticipated by Malloy (U.S. Patent No. 6,205,447).

6.1 In considering the independent claims 31,38, and 45, Malloy teaches the functional equivalence of a method in combination with first, second, and third tables of data, the first table organizing a first type according to a first attribute and a second attribute, the second table organizing a second type according to a third attribute, the third table organizing a third type according to the first attribute and the third attribute, in particular the steps of: modeling a measure according to the second type of the second table (*fig.1-4 (322,418)*); modeling a first dimension according to the third attribute of the second table (*fig.1-4, col.6 lines 12-59*); modeling a second dimension according to the second attribute of the first table (*fig.1-4, col.6 lines 12-59*); tying the measure to the first dimension according to the third attribute of the second table to allow the measure to access data for the first dimension according to the third attribute (*fig.1-4, col.8 line 2-col.9 line 33*); and tying the measure to the second dimension by, for each entry of the first dimension, allocating a value of the measure for the entry of the first dimension by: identifying each row in the third table within which a value of the third attribute matches a value of the entry of the first dimension (*fig.3-4, col.6 line 12-col.7 line 63*); identifying a value of the first attribute within each identified row in the third table, and, for each identified value of the first attribute (*fig.3-4, col.6 line 12-col.7 line 63*); identifying each row in the first table that includes the value of the first attribute, the first table including no data for the measure (*fig.3-4, col.6 line 12-col.7 line 63*); identifying a value of the second attribute within each identified row in the first table (*fig.3-4, col.6 line 12-col.7*

*line 63*); and identifying each entry in the second dimension for which a value of the entry of the second dimension matches an identified value of the second attribute (*fig.3-4, col.6 line 12-col.7 line 63*); and allocating at least a portion of the value of the measure for the entry of the first dimension to at least one of each identified entry of the second dimension (*fig.3-4, col.6 line 12-col.7 line 63*). Malloy further the processor and memory of claim 45 (see *fig.1, col.4 line 62-col.5 line 13*).

6.2 With regards to claims 32,39, and 46, Malloy teaches the step modeling the measure according to the second type of the second table, the second table comprising data stored in a relational database (see *fig.3-4 (322,418), also see abstract*).

6.3 As per claims 33,40, and 47, Malloy teaches the step of allocating a complete portion of the value of the measure for the entry of the first dimension to every identified entry of the second dimension (see *fig.3-4, col.6 line 12-col.7 line 63*).

6.4 Regarding claims 34,41, and 48, Malloy teaches the step of allocating less than a complete portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension (see *fig.3-4, col.6 line 12-col.7 line 63*).

6.5 As per claims 35,42, and 49, Malloy teaches the step of allocating an even portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension (see *fig.3-4, col.6 line 12-col.7 line 63*).

6.6 With regards to claims 36,43, and 50, Malloy teaches the step of allocating a proportional portion of the value of the measure for the entry of the first dimension to each identified entry of the second dimension (see *fig.3-4, col.6 line 12-col.7 line 63*).



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6.7 As per claims 37,44, and 51, Malloy teaches the step of allocating a total value of the measure for the entry of the first dimension to a pre-determined principal identified entry of the second dimension (*see fig.3-4, col.6 line 12-col.7 line 63*).

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7.1 Shah et al. reference numbers (***USPG\_PUB 2002/0059267***) disclose a method for determining data queries to be sent by an analytical server monitoring system (RDBMS) by using hierarchical level metadata to describe the various structures.

7.2 Roussopoulos et al (***USPG\_PUB No. 2003/0126143***) teaches a method relating to data warehouses and ability to create and maintain data cubes of a multi-dimensional data.

7.3 Nwabueze et al. (***U.S. Patent No. 6,775,675***) teaches a method for abstracting data from various data structures and managing the presentation of data.

7.4 Yamashita (***U.S. Patent No. 6,985,906***) teaches a method and system for multidimensional database management.

8. Claims 31-51 are rejected and this action is non-final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Pierre-Louis whose telephone number is 571-272-8636. The examiner can normally be reached on Mon-Fri, 8:00AM-4:30PM.

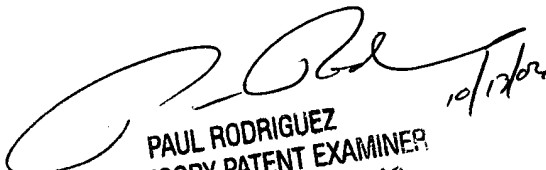
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 3, 2006

APL

  
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10/12/06